

1/3/72
Rough Draft
RWTice:mlr

PLUM FIRE HAZARD ABATEMENT

On May 5, 1965, lightning touched off a raging two day fire that destroyed almost 7,000 acres of trees and more than 11,000 acres of rangeland on the largest manmade forest in the United States. This largest forest fire in the history of the Nebraska National Forest started at 11:25 AM on May 5. Ninety per cent of the trees in the burned area were killed. There were no injuries or loss of life, however, ten 4-H camp cabins were destroyed and several other buildings damaged.

The fire started in grassland, 2½ miles west of the planted forest. It was immediately discovered by a U.S. Forest Service man who saw the lightning bolt. He and one other man were only two miles from the origin. Within 5 minutes they were on the fire with a small pumper. Another Forest Service crew of two men arrived with a pumper about the same time. Strong gusty winds from the west and dry fuels prevented them from controlling the fire. Within an hour, more than 200 fire fighters were on the line but the fire had grown to 340 acres and strong westerly winds continued. Several backfiring attempts failed. By 6PM, 436 fire fighters, 111 pumper units, 5 bull dozers, 5 plows, 2 motor patrols, and one observation ~~plane~~ plane were on the fire. By this time, the fire had spread to 17,000 acres. The prompt and hard work of the fire fighters undoubtedly saved the nearby town of Halsey, Nebraska, from being burned.

More than 350 skilled fire fighters from volunteer fire departments, ranches, and high schools helped forest service personnel fight the fire. They brought 60 pumper units, cattle sprayers, bull dozers, shovels, and sacks. Many of them have fought range fires since they were youngsters.

The resulting devastation of the man-made forest was a sad sight to behold.

Nebraskans have a strong feeling of ownership toward their National Forest. This forest was a culmination of a dream of Dr. Charles Bessey, eminent University of Nebraska botanist, and other early day foresters who had a conviction that trees could be grown on the great plains. The Nebraska National Forest was established by Presidential Proclamation in 1902 to demonstrate that Forests ~~were~~ could be planted in the Great Plains area. It was also used to determine tree species adaptable to this soil type and climate. As a result of these efforts, many successful plantings have been made on the Great Plains. The Bessey Nursery located on the North end of the Forest was founded to provide planting stock for the plantations on this and other National Forests. Later, the Federal Government authorized the sale of Nursery seedlings to homesteaders under the Kincaid Act and later the Clark-McNary Act.

The Plum Fire not only did tremendous damage to the Forest at the time of the fire, but has caused tremendous managerial, esthetic and maintenance problems since the fire.

Immediately after the fire, the burned area was seeded to grass to keep down the wind erosion. Trees adjacent to the main roads were cut to reduce the hazard of trees falling on roads, vehicles or possibly causing personal injury to those utilizing the Forest. Replanting immediately started along main roads and near recreation areas.

By 1970, most of the dead trees had reached the point where they were rapidly decaying and dropping with the ~~lightest~~ slightest wind. After any wind storm, large numbers of trees were found to have fallen over trails, roads, fences, and signs. The fallen trees caused a large maintenance problem at times when the District had limited man power, funds, or the necessary time to cope with the problems. The large number of snags near State Highway #2 distorted the impressions of many of the ~~the~~ visitors to the Forest. Nearly everyone after climbing the Scott Lookout tower came away with the impression that the whole forest burned down. Anyone walking in~~the~~ the burned area even during periods of light wind was in danger of being hit by a falling tree. Fire protection was reduced because of the fire trails being blocked with fallen trees. The combination of tall grass and heavy fuels on the ground made for a fuel condition of very high a rate of spread and high resistance to control. It was found that once a tree was on the ground, decomposition was rapidly accelerated.

Early in 1970 a plan was developed with the objective of improving the esthetics, reducing hazards to the visiting public, save many man hours repairing broken fences, and reduce fire hazards in the most heavily used areas. Dead trees were to be knocked down by caterpillar tractor where possible. Since many of the areas had been ~~re~~ replanted, this method was not feasible. In areas of heavy planting the trees were to be felled, lopped and scattered. This work could be done in the winter during the time when the District's workload was less than at other seasons of the year.

The Hazard Abatement work started in February 1970 with the first objective being to reduce the hazards surrounding and adjacent to the State 4-H Camp, and the area within the Travel Influence Zone on State Highway #202 to the Scott Lookout Tower. During the winter of ~~the~~ 1971, work continued reducing the

hazards south of the Bessey Nursery area and in the areas visible from State Highway #2 and the campground entrance. Some work was also done on Forest Road #223 and #203 that year. Future plans are to continue the work along both of these roads.

In addition, during periods of high fire danger, FFF personnel were employed to open up the many fire breaks and sand trails and still be readily available to fight forest fires.

During the first years operation it was found that a 16 foot steel pipe could be attached to the dozer blade and very effectively knock down trees in a wide swath. This of course created safety hazards resulting from trees breaking off midway or hitting other trees which possibly could strike the cat cab and driver. The ~~x~~ crew ~~x~~ very effectively reduced this hazard by placing plywood sideboards around the cab with only a small opening for the driver to see through. Work progressed quite rapidly following the initial tryouts. Chain saw~~x~~ operators were only required to pick up an occasional tree which was missed by the cat or in areas where there was a concentration of the seedlings. The crews safety record has been excellent.

In the past two years, the hazard abatement project has cleared approximately 600 acres of the projected 1000 acres. The results have been very encouraging. Most sand trails have been opened for ~~x~~ vehicular travel. Fence maintenance has been reduced. Fire hazards along much of the main~~xxx~~ traveled roads has been greatly reduced. But the greatest effect has been on the esthetics. The Forest visitor no longer receives the dismal impression that the whole forest burned. As a result of knocking down the snags, more trees are seen that weren't burned by the fire and the planted seedlings ~~are~~ becoming apparent above the tall grass and pushed down trees. Of course, fire ~~x~~ killed snags can still be seen at a distance But this does not have the same effect as

viewing them close up. The planted trees give the effect that something
~~indeed~~ indeed is growing again in a once devastated area.